**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1-15. (canceled)

16. (currently amended) A method for processing residual gas, comprising:

providing a chamber;

introducing residual gas into the chamber, the residual gas having a first toxic level;

introducing an inert gas;

diluting the residual gas;

introducing a reactive gas into the chamber to cause a reaction between the diluted residual gas and the reactive gas to produce a mixed gas;

outputting the mixed gas from the chamber, the mixed gas having a toxic level lower than the first toxic level; [[and]]

providing a powder-collection apparatus coupled to a bottom of the chamber via a first gate and a second gate to allow continuous removal from the chamber and the powder-collection apparatus of powder produced by the reaction of the residual gas, the inert gas and the reactive gas in the chamber;

opening the first gate of the powder-collection apparatus to collect the powder falling into the power-collection apparatus due to its weight; and

closing the first gate and opening the second gate to remove the powder when an amount of the powder collected reaches a predetermined level.

17. (original) The method as claimed in claim 16, further comprising a step of exhausting the residual gas, the inert gas and the mixed gas from a gas outlet mechanism into a wet scrubber.

18. (cancelled)

19. (original) The method as claimed in claim 16, further comprising a step of providing at least one baffle in the chamber to increase the path traveled by the diluted residual gas and reactive gas in the chamber.

20. (previously presented) The method as claimed in claim 16, further comprising a step of cooling the chamber with a water-cooling pipe.

21. (currently amended) A method for processing residual gas, comprising:

providing a chamber;

introducing residual gas into the chamber, the residual gas having a first toxic level;

introducing an inert gas;

diluting the residual gas;

introducing a reactive gas into the chamber to cause a reaction between the diluted residual gas and the reactive gas to produce a mixed gas;

outputting the mixed gas from the chamber, the mixed gas having a toxic level lower than the first toxic level; [[and]]

providing a powder-collection apparatus coupled to a bottom of the chamber via a first gate and a second gate, wherein, during an operation of the chamber, said first gate and said second gate collectively operate to allow continuous removal of powder from the powder-collection apparatus without interruption of the operation of the chamber;

opening the first gate of the powder-collection apparatus to collect the powder falling into the power-collection apparatus due to its weight; and

closing the first gate and opening the second gate to remove the powder when an amount of the powder collected reaches a predetermined level.

22. (previously presented) The method as claimed in claim 21, further comprising a step of exhausting the residual gas, the inert gas, and the mixed gas from a gas outlet mechanism into a wet scrubber.

23. (previously presented) The method as claimed in claim 21, further comprising a step of providing at least one baffle in the chamber to increase the path traveled by the diluted residual gas and the reactive gas in the chamber.

24. (previously presented) The method as claimed in claim 21, further comprising a step of cooling the chamber with a water-cooling pipe.